PHASE I TO PHASE III IMPLEMENTATION TRACKING THROUGH THE USE OF A MATRIX.

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BACKGROUND: The purpose of this presentation is to inform the audience about the actual aspects of the Air Forces Remedial Process Optimization. This process mirrors Environmental Protection Agencies "Value Engineering". However, Alaska's remoteness and lack of local infrastructure adds to a dynamic challenge of environmental restoration. As indicated by one RPO team member "The cost of getting someone to site is more than taking another VOA sample."

This presentation details aspects of the remoteness issues and how the RPO process can assist the project manager in developing team building with tribal and local communities by detailing good science and balancing traditional ways into the installation restoration program while attempting to save taxpayer funds and close sites early.

Discussion: The following is a description of the slides that will be presented. It is my hope the attendee will come away with the impression that size and distance really matter when factoring in costs to remediate sites:

Slides 1-9 Detail the outline of the discussion namely the Remedial Process Optimization. What the process is and some of the unique challenges that apply to working in remote Alaska. Where there is little transportation and even the chance: example- to fly from Los Angles to Kansas City circle for an hour and return to Los Angeles to try another day.

Slide 10 jokingly introduces the mantra of the RPO and what we all are aware of due to the fact that we are in this environmental remediation field.

Slides 11-20 Further detail the unique challenges that apply to working in remote Alaska. Outline of the discussion namely the Remedial Process Optimization.

Sides 20-21 introduce the unique tribal challenges that apply to working in remote Alaska at our sites and the extra effort it takes to learn from each other.

Slides 23-27 Introduce the RPO from a (base) Remedial Project Managers observation.

Slide 28 Introduces: REMEDIAL PROCESS OPTIMIZATION GUIDELINES**.**

Ensure Protectiveness of Human Health and the Environment
Accelerate Site Transfer or Closure
Collect Appropriate Data to Evaluate Remediation Progress
Establish Appropriate Cleanup Goals
Reduce Operation Maintenance & Monitoring Costs
Site Closure

Ensuring the remedies selected are RISK PROTECTIVE - COST EFFECTIVE - SITE CLOSEOUT

Slides 29-33 introduces the reader to the remote location of the Galena site and some of the issues dealing with lack of highways. Barge or aircraft is the only way in. Of course you could walk but as the old aviators indicated "see it in a day or walk for a week" when aircraft finally came to the region. Still today it is a ninety minute flight from Anchorage. The Yukon River is frozen for approximately 6 months with ice as much as 12 feet thick. Temperatures may reach 50 below 0.

Slides 33-34 indicate some of the issues that were awaiting the RPO team. Recent issues had EPA sampling wells in old town and a school was renovated over a benzene plume caused by the AF.

Slides 36-44 show how the team responded to immediate health issues at the site. The RPO was in June, by July funds had been set aside, contracts negotiated and field work started in August.

Slides 45-47 show you a new site Campion Radar Relay Station. This areas concern is petroleum oil, lubricants reaching the Yukon River. The team conducted an ecological risk assessment. Campion is about 10 miles away from Galena. Bears frequent the area as noted in slide 47.

Slide 48 indicates jokingly how we are all observed but this is very true when contaminated sites may have impacted food resources at the site.

Slides 49-50 take us about 500 miles to the southwest to King Salmon Airport (KSA). KSA is a unique base in where it leads into Bristol Bay fisheries, the richest salmon fisheries in the world. Salmon runs that may number 30 million fish have been known to reach the area. KSA lies on the Naknek River that drains into KVICHAK Bay and Bristol Bay.

Slide 51 indicates "combat fishing for Salmon on the Naknek River."

Slides 52-53 show a picture of the Katmai National Park that drains into the Naknek River. Just upriver from KSA. Bears frequent the area eating salmon and berries. It is also the site of a volcanic eruption in the early 1900's that blew a billion tons of ash into the area and darkened Kodiak Island for three days. The King Salmon Traditional Village Council has recently been granted federal recognition by the government. All records and site history was lost in the 1900's eruption. The surviving member relocated to King Salmon.

Slides 54 through 78 indicate some of the usual aspects of remediation and the extremely unusual such as remediation time frames that may be a high as 300 years. More important are creeks and streams that have all five species of salmon and are an important food resource for local populations. I also discuss monthly meetings w/RAB and some new areas of concern.

Slides 79-88 give detail of RPO and a developed matrix for the sites. This matrix and team building allow the RPM as well as headquarters to evaluate how well "we" are reaching remediation goals and meeting five year review requirements. The matrix is also a living document that can be updated as needed.

Slide 89-90 give an idea how hard it is to work in the environmental area. We should rely on what works and what we know. However, we should embrace new technologies but use them wisely.